

## **WATER SAMPLE COLLECTION GUIDELINES**

### **Preparations**

- Plan your day carefully. The water samples must be delivered to the lab within 24 hours after collection. Plan your travel times so you will arrive before the lab closes. If you have questions about lab hours - call the lab to find out – see the attached phone list.
- Make sure you have all the necessary equipment in your test kit. Your kit should include the following:
  - Chlorine disinfectant spray bottle. Instructions for preparing the disinfectant are given at the end of this document.
  - Chlorine test strips
  - A small bottle of concentrated chlorine bleach.
  - A small bottle of hand soap.
  - Clean disposable paper towels
  - Enough sample vials to complete your sampling route
  - Ice to cool the water sample vials (obtained at local stores)
  - Sample vial holder
  - Cooler box to contain the equipment, samples and ice.
- Use only approved-type sample vials. The lab will only accept approved-type vials. If you have questions about a vial, call the lab.
- Have the water system ID numbers and address handy. You will need them to complete the sample paper work.

### **Coliform Sample Collection**

- Select sample sites that are protected from contamination. The utility or bathroom sinks are possible sample sites. Take the sample from a sink that is in common use. Avoid hoses and outside hose bibs.

- Sample only cold water. Avoid sampling water that has been treated by a water conditioner.
- Wash your hands and dry your hands.
- Remove any screens, aerators, filters, etc. from the end of the tap.
- Run the cold water tap for 30 seconds.
- Turn off the water before you spray disinfectant into and around the tap discharge. Directions for disinfectant are given at the end of these instructions.
- Wait for at least 60 seconds. The chlorine needs time to work. After 60 seconds have past, turn the cold water on and run for 3 to 5 minutes. A gentle water stream is all you'll need. You can fill out the sample paper work while the water is running.
- Open the sample vial carefully. Do not touch the inside surface of the vial or its lid. CAUTION, when filling the vial, do not over flow it.
- Place the open mouth of the vial into the water flow and fill it. Fill the vial up to the 100 ml fill line and quickly remove it from the water.
- If you overfill the vial, carefully pour out the extra water. If you spill out too much water, simply refill to the correct amount. Securely place the cap on the vial.
- Dry off the outside of the vial with a clean paper towel.
- Wrap the sample paper work around the outside of the sample vial and secure it with a rubber band.
- Place it into the sample vial holder.
- Place the holder into the iced cooler.
- Do not allow the ice to contact the sample vial
- Proceed to the next sample site or take the sample to the lab.

### **Nitrate Sample Collection**

- Select sample sites that are protected from contamination. The utility or bathroom sinks are possible sample sites. Take the sample from a sink that is in common use. Avoid hoses and outside hose bibs.
- Sample only cold water. Avoid sampling water that has been treated by a water conditioner.

- Wash your hands and dry your hands.
- Turn the cold water on and run for 3 to 5 minutes. A gentle water stream is all you'll need. You can fill out the sample paper work while the water is running.
- you'll need.
- Open the sample vial carefully. Do not touch the inside surface of the vial or its lid. CAUTION, when filling the vial, do not over flow it.
- Place the open mouth of the vial into the water flow and fill it. Fill the vial up to the required level and quickly remove it from the water. CHECK WITH THE LAB ON THE AMOUNT OF WATER TO BE COLLECTED.
- If you overfill the vial, carefully pour out the extra water. If you spill out too much water, simply refill to the correct amount. Securely place the cap on the vial.
- Dry off the outside of the vial with a clean paper towel.
- Wrap the sample paper work around the outside of the sample vial and secure it with a rubber band.
- Place it into the sample vial into the iced cooler.
- Proceed to the next sample site or take the sample to the lab.

## **CHLORINE DISINFECTANT SPRAY PREPARATION**

READ THROUGH THESE INSTRUCTIONS BEFORE YOU BEGIN.

BE CAREFUL – TREAT THE BLEACH WITH RESPECT - CONCENTRATED BLEACH SPILLS WILL DISCOLOR MANY TYPES OF MATERIALS. IF THE BLEACH MAKES CONTACT WITH YOUR SKIN, WASH IT OFF QUICKLY.

DO NOT MIX CHLORINE WITH AMMONIA – THIS TYPE OF MIXING WILL GIVE OFF A DEADLY GAS.

- The chlorine disinfectant spray solution is made by mixing common household bleach with clean tap water. You do not need to know the exact amount of bleach or water. Simple trial and error will quickly get you to the right strength of spray solution.
- To make-up a pint of spray, start by placing ¼ teaspoon of beach into the container and then slowly fill it with cool tap water. Replace the cap and shake the bottle for 5 seconds.
- Test the solution strength with the chlorine test strips by pouring some of the solution onto a test strip. DO NOT SPRAY THE SOLUTION ONTO THE STRIP. The goal is to have a solution strength of 100 PPM.

- If the solution is too weak add one or two more drops of bleach, shake the container and retest. Continue one until you achieve the goal of 100 PPM.
- If the solution is too strong, dilute the solution by pouring some of it down the sink and refilling with water. Continue until you achieve the goal of 100 PPM.
- **WARNING** – Spray bottles leak if not kept upright. If you lay the bottle down on its side, it will leak and discolor things. When not in use, keep the bottle in the test kit container (the ice chest/cooler).